Title: On binomial Thue equations and ternary equations with $S$-unit coefficients

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In this paper we obtain some new results for a collection of equations of the form

\[(2) \ Ax^n - By^n = \pm 1 \] resp. \[(3) \ Ax^n - By^n = z^m \] with \(m \in \{3, n\}\), where \(x, y, z, A, B, n\) are unknown nonzero integers such that \(n \geq 3\) is a prime and \(AB\) is composed of two fixed primes. We prove among other things that under certain conditions formulated in Section 2, equations (3) have no solutions with \(|xy| > 1, Ax, By\) and \(z\) coprime and \(n > 13\) (cf. Theorems 2 to 4). Combining this with some other results and techniques, we establish a similar result for equations (2) (cf. Theorem 1).

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